

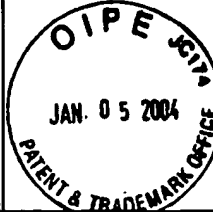


<p align="center">LIST OF PRIOR ART CITED BY APPLICANT</p> <p align="center">(PTO-1449)</p>		ATTY. DOCKET NO. UMBC-0011		APPLN. SERIAL NO. NEW			
		APPLICANT(S) Nirmala CHANDRASEKHARAN et al.					
		FILING DATE November 26, 2003		GROUP			
U.S. PATENT DOCUMENTS							
EXAMINER'S INITIALS	*PATENT NO.	*ISSUE DATE	*INVENTOR NAME	CLASS	SUBCLASS	FILING DATE	
JC	6,413,267	07/02/02	Dumoulin-White et al.				
JC	5,954,658	09/21/99	Gorti				
JC	3,808,439	04/30/74	Renius				
FOREIGN PATENT DOCUMENTS							
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						Yes	No
OTHER ART (Including Author, Title, Date, Pertinent Pages, Publisher, Place of Publication, Etc.)							
JC 	Caspers et al. "Combined In Vivo Confocal Raman Spectroscopy and Confocal Microscopy of Human Skin," Biophysical Journal, Volume 85, July 2003, pages 572-580						
	Kamioka, et al. "A Three-dimensional Distribution of Osteocyte Processes Revealed by the Combination of Confocal Laser Scanning Microscopy and Differential Interference Contrast Microscopy," Bone Volume 28, No. 2, February 2001, pages 145-149						
	Grotz, et al. "Confocal Laser Scanning Microscopy: A Nondestructive Subsurface Histotomography of Healthy Human Bone," CALCIF Tissue Int., Volume 65, pages 8-10, 1999						
	Guo et al. "Subsurface Tumor Progression Investigated by Noninvasive Optical Second Harmonic Tomography," Proc. Natl. Acad. Sci., Volume 96, pages 10854-10856, 1999						
	Barton et al. "Three-Dimensional Reconstruction of Blood Vessels from in vivo Color Doppler Optical Coherence Tomography Images," Dermatology, Volume 198, pages 355-361, 1999						
	Afanasyeva, et al. "Biomedical, Environmental and Industrial Application of Fiberoptical Infrared Spectroscopy," Subsurface Sensing Technologies and Applications II, pages 272-283 (2000)						
	Hoelen et al. "Non-destructive Photoacoustic Subsurface Tissue Imaging: A Feasibility Study," SPIE, Volume 2628, pages 308-318,						
EXAMINER				DATE CONSIDERED			
/Jacqueline Cheng/				(07/24/2006)			

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

LIST OF PRIOR ART CITED BY APPLICANT  (PTO-1449)				ATTY. DOCKET NO. UMBC-0011		APPLN. SERIAL NO. 10/721,824	
				APPLICANT(S) Nirmala CHANDRASEKHARAN, Ronak MEHTA, Soumi SAHA and Brian M. CULLUM			
				CUSTOMER NO. 34610			
				FILING DATE November 26, 2003		GROUP To Be Determined	
U.S. PATENT DOCUMENTS							
EXAMINER'S INITIALS	*PATENT NO.	*ISSUE DATE	*INVENTOR NAME	CLASS	SUBCLASS	FILING DATE	
JC	6,522,903 B1	02/18/2003	BERMAN, et al.	600	316	10/19/2000	
	6,503,204 B1	01/07/2003	SUMANAWEERA, et al.	600	459	03/31/2000	
	6,344,051 B1	02/05/2002	DUMOULIN-WHITE, et al.	607	89	08/09/1999	
	6,490,470 B1	12/03/2002	KRUGER	600	407	06/19/2001	
	6,292,682 B1	09/18/2001	KRUGER	600	407	06/27/2000	
	6,212,421 B1	04/03/2001	VO-DINH, et al.	600	407	09/03/1999	
	6,104,942	08/15/2000	KRUGER	600	407	05/12/1998	
	6,102,857	08/15/2000	KRUGER	600	437	05/13/1998	
	4,059,010	11/22/1977	SACHS	73	596	06/23/1975	
	5,713,356	02/03/1998	KRUGER	128	653.1	10/04/1996	
↓	5,924,986	07/20/1999	CHANDLER, et al.	600	407	09/10/1997	
	6,544,193 B2	04/08/2003	ABREU	600	558	02/23/2001	
U.S. PATENT APPLICATION PUBLICATIONS							
	*PATENT APPLN. PUB. NO.	*PUB. DATE	*APPLICANT	CLASS	SUBCLASS		
U.S. PATENT APPLICATIONS							
	*APPLN. NO.	*FILING DATE	*INVENTOR	CLASS	SUBCLASS		
FOREIGN PATENT DOCUMENTS							
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						Yes	No
OTHER ART (Including Author, Title, Date, Pertinent Pages, Publisher, Place of Publication, Etc.)							
EXAMINER /Jacqueline Cheng/ (07/24/2006)				DATE CONSIDERED			

EXAMINER: Initial if reference considered, with the reference citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

APPLN. SERIAL NO.
10/721,824

FILING DATE
November 26, 2003

GROUP
3737

U.S. PATENT DOCUMENTS

[illegible]

U.S. PATENT APPLICATION PUBLICATIONS

	*PATENT APPLN. PUB. NO.	*PUB. DATE	*APPLICANT	CLASS	SUBCLASS

U.S. PATENT APPLICATIONS

	*APPLN. NO.	*FILING DATE	*INVENTOR	CLASS	SUBCLASS	

FOREIGN PATENT DOCUMENTS

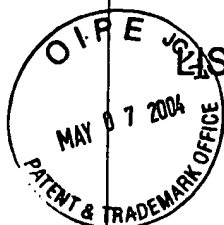
[illegible]

OTHER ART (Including Author, Title, Date, Pertinent Pages, Publisher, Place of Publication, Etc.)

DATE CONSIDERED

/Jacqueline Cheng/ (07/24/2006)

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



**LIST OF PRIOR ART CITED BY
APPLICANT
(PTO-1449)**

ATTY. DOCKET NO.
UMBC-0011

APPLN. SERIAL
NO.
10/721,824

APPLICANT(S)
Brian M. CULLUM et al.

FILING DATE
November 26, 2003

GROUP

**LIST OF PRIOR ART CITED BY APPLICANT
(PTO-1449)**

OTHER ART (Including Author, Title, Date, Pertinent Pages, Publisher, Place of Publication, Etc.)

Malich, A., Boehm, T., Facius, M., Freesmeyer, M. O., Fleck, M., Anderson, R., and Kaiser, W.A., Differentiation of Mamogrpically Suspicious Lesions: Evaluation of Breast Ultrasound, MET Mammography and Electrical Impedance Scanning as Adjunctive Technologies in Breast Cancer Detection, *Olin. Radiol.* 56 (4), 278-283, 2001.

Neeman, M., Provenzale, J. M., and Dewhirst, M. W., Magnetic Resonance Imaging Applications in the Evaluation of Tumor Angiogenesis, *Semin. Radiat. Oncol.* 11(1), 70-82, 2001.

Malpica, A., Zuluaga, A., Boiko, I., Richards-Kortum, R., and Pollen, M., Assessment of cervical squamous intraepithelial lesions by optical coherence tomography and colposcopy, *Alodern Pathology* 14(1), 819, 2001.

Teamey, O. J., Brezinski, M. E., Bouma, B. E., Boppart, S. A., Pitris, C., Southern, J. F., and Fujimoto, J. O., in vivo Endoscopic Optical Biopsy with Optical-coherence Tomography, *Science* 276, 2037-2039, 1997.

Schmitt, I. M., Yadlowsky, M., and Bonner, R. F., Subsurface Imaging of Living Skin with Optical Coherence Microscopy, *Der,natol.* 191, 93-98, 1995.

Brezinsld, M. E. and Fujimoto, 1. O., Optical Coherence Tomography: High-Resolution Imaging in Nontransparent Tissue, *IEEE J. Selected Top. Quantum .Electon.* 5 (4), 1185-1191, 1999.

Brezinsld, M. E., Teamey, O. J., Bouma, B. E., Izatt, if. A., Hee, M. R., Swanson, E. A., Southern, if. F., and Fujimoto, 3. O., Optical Coherence Tomography for Optical Biopsy: Properties and Demonstration of Vascular Pathology, *Circulation* 93, 1206-1213, 1996.

Pitris, C., Goodman, A., Boppart, S. A., Libus, if. if., and Fujimoto, J. O., High-resolution Imaging of Gynecologic Neoplasms Using Optical Coherence Tomography, *Obstet Gynecol* 93, 135-139, 1998.

Alfano, R. R., Tang, O. C., Pradhan, A., Lam, W., Choy, D., and Opher, E., Fluorescence Spectra from Cancerous and Normal Human Breast and lung Tissues, *IEEE .1 Quantum Electron* 23(10), 1806-1811, 1987.

Richards-Kortum, R. and Sevick-Muraca, E., Quantitative Optical Spectroscopy for Tissue Diagnosis, *Annual Review ofPhysical Ghemistiy* 47, 555-606, 1996.

JC

JQ ✓	Alfano, R. R., Tomaselli, V.P., Beuthan, I., Feld, M. S., Flotte, T., Fujimoto, 3.6., and Thomsen, S., Advances in optical biopsy and optical mammography - Panel discussion - Review and summary of presentations, in <i>Advances in Optical Biopsy and Optical Mammography</i> New York Acad. Sciences, New York, 1998, pp. 194-196.
✓	Drezek, R., Broolmer, C., Pavlova, I., Boiko, I., Malpica, A., Lotan, R., Follen, M., and Richards-Kortum, R., Autofluorescence microscopy of fresh cervical-tissue sections reveals alterations in tissue biochemistry with dysplasia, <i>Photochemistry and Photo/A ology</i> 73 (6), 636-641, 2001.
✓	Cogblan, L., Utzinger, U., Drezek, R., Heintzelman, D., Zuluaga, A., Brookner, C., RichardsKortum, R., Gimenez-Conti, I., and Pollen, M., Optimal fluorescence excitation wavelengths for detection of squamous infta-epithelial neoplasia: results from an animal model, <i>Optics Express</i> 7 (12), 436446, 2000.
✓	Itzinger, U., Heintzehrnn, O. L., Mahadevan-Jansen, A., Malpica, A., Follen, M., and Richards-Kortum, R., Near-infrared Raman spectroscopy for in vivo detection of cervical precancers, <i>Applied Spectroscopy</i> 55 (8), 955-959, 2001.
✓	Georgakoudi, I., Jacobson, B. C., Van Dam, BacImqan, V., Wallace, M. B., Muller, M. O., Zhang, Q., Badizadegan, K., Sun, O., Thomas, 6. A., Perelman, L. T., and Feld, M. S., Fluorescence, reflectance, and light-scattering spectroscopy for evaluating dysplasia in patients with Barrett's esophagus, <i>Gastroenterology</i> 120 (7). 1620-1629, 2001.
✓	Wang, T. D., Crawford, I. M., Feld, M. S., Wang, Y., Itzkan, I., and Van Dam, In vivo identification of colonic dysplasia using fluorescence endoscopic imaging, <i>Gastrointestinal Endoscopy</i> 49 (4), 447455, 1999.
✓	Panjehpour, M., Overholt, B. F., Vo-Dinh, T., Haggitt, R. C., Edwards, D. H., and Buckley, F. P., Endoscopic Fluorescence Detection of High-Grade Dysplasia in Barrett's Esophagus, <i>Gastroenterology</i> 111 (1), 93-101, 1996.
✓	Vo-Dinh, T., Panjehpour, M., Overholt, B. F., and Buckley, P., Laser-Induced Differential Fluorescence for Cancer Diagnosis without Biopsy, <i>Applied Spectroscopy</i> 51(1), 58-63, 1997.
✓	Panjehpour, M., Overholt, B. F., Schmidhammer, 1. L., Farris, C., Buckley, P. F., and Vo-Dinh, T., Specfroscopic Diagnosis of Esophageal Cancer - New Classification Model, Improved Measurement System, <i>Gastrointestinal Endoscopy</i> 41(6), 577-581, 1995.
✓	Watts, W. E., Isola, N. K., Frazier, D., and Vo-Dinh, T., Differentiation of normal and neoplastic cells by synchronous fluorescence: Rat liver epithelial and rat hepatoma cell models, <i>Analytical Letters</i> 32 (13), 2583-2594, 1999.
✓	Panjehpour, M., Overholt, B. F., Vo-Dinh, T., Haggitt, R. C., Edwards, D. H., Buckley, F. P., and Decosta, I. F., Fluorescence Spectroscopy for Detection of Dysplasia in Barrett's Esophagus, <i>Gastroenterology</i> 110 (4), A574-A574, 1996.



JC ✓

Panjehpour, M., Overholt, B. F., Vo-Dinh, T., Paris, C., and Sneed, R., Fluorescence Spectroscopy for Detection of Malignant-Tissue in the Esophagus, *Gastroenterology* 104(4), A439-A439, 1993.

✓ Wang, H. W., Willis, Canto, M. I. F., Sivak, M. V., and Izatt, A., Quantitative laser scanning confocal autofluorescence microscopy of normal, premalignant, and malignant colonic tissues, *IEEE Transactions on Biomedical Engineering* 46 (10), 1246-1252, 1999.

✓ Wagnieres, O. A., Star, W. M., and Wilson, B. C., In vivo Fluorescence Spectroscopy and Imaging for Oncological Applications, *Photochemistry and Photobiology* 68(5), 603-632, 1998.

✓ Tang, G.C., Pradhan, A., Sha, W., Chen, Liu, C.H., WaH, Alfano, R.R. Pulsed and cw laser fluorescence spectra from cancerous, normal and chemically treated normal human breast and lung tissues, *Applied Optics* 28(12)2337-2342, 1989

✓ Masters, B. R., So, P. T., and Gratton, E., Multiphoton Excitation Fluorescence Microscopy and Spectroscopy of In Vivo Human 51dm, *Biophys. J.* 72 (6), 2405-2412, 1997.

✓ Bewersdorff, Pick, R., and Hell, S. W., Multifocal Multiphoton Microscopy, *Opt. Lett.* 23, 655-657, 1998.

✓ Williams, R. M., Zipfel, W. R., and Webb, W. W., Multiphoton microscopy in biological research, *Current Opinion in Chemical Biology* 5 (5), 603-608, 2001.

✓ Koenig, IC, So, P. P. C., Mantulim, W. W., Tromberg, B., and Gratton, E., Two-Photon Excited Lifetime Imaging of Autofluorescence in Cells During UVA and NIR Photostress, *J. Microsc.* 183, 197-204, 1996.

✓ Kaiser, W., Garrett, C.B., Two-Photon Excitation in $\text{CaF}_2: \text{Eu}^{2+}$ Phys. Rev. Lett. 7, 229 1961

✓ Beitz, IV., Hinaus, B.M., and Huang, Simultaneous acquisition of photoacoustic and fluorescence spectra at high sensitivity from powdered samples at variable temperature, *App. Optics* 33, 921-929, 1994

✓ Lakowicz J.R., Glyczynski, I., and Szmacinski, H., Spatially localized ballistic two-photon excitation in scattering media, *Biospectroscopy* 4, 303-310, 1998

✓ Mobley, J., Culluni, B.-M., and Vo-Dinh, T., Method for the Simultaneous Acquisition of Optical Absorption and Sonic Attenuation with Photoacoustic Ultrasound, *SPIE Proc.* 3911, 180-190, 2000.

✓ Hoelen, C. O. A., de Mul, F. F. M., Pongers, R., and Dekker, A., Three-dimensional Photoacoustic Imaging of Blood Vessels in Tissue, *Optics Letters* 23 (8), 648-652, 1998.

✓ Bednov, A. A., Savateeva, E. V., and Oraevsky, A. A., Opto-acoustic Monitoring of Blood Optical Properties as a Function of Glucose Concentration, *Proc. SPIE* 4960, 2003.

✓ Beard, P.C., Photoacoustic Imaging of Blood Vessel Equivalent Phantoms, *Proc. SPIE* 4618, 54-62, 2002.

✓ Beard, P. C. and Mills, T. N., An Optical Detection System for Biomedical Photoacoustic Imaging, *Proc. SPIE* 3916, 100-109, 2000.



SHEET 4 of 4

JC

Andreev, V. A., Svateeva, E., Karabutov, A. A., Motamedi, M., Orihuela, B., and Oraevsky, A. A., Detection of Prostate Cancer with Opto-acoustic Tomography, *Proc. SPIE* 4960, 2003.

Andreev, V. A. and Oraevsky, A. A., Multiresolution Reconstruction Method to Opto-Acoustic Imaging, *Proc. SPIE* 4960, 2003.

Beard, P. C. and Mills, P. N., 2-D Line-scan Photoacoustic Imaging of Absorbers in a Scattering Tissue Phantom, *Proc. SPIE* 4256, 3442, 2001.

Esenaliev, R. O., Karabtov, A. A., and Oraevsky, A. A., Sensitivity of Laser Opto-acoustic Imaging in Detection of Small deeply Embedded Tumors, *IEEE J Select. Topics Quantum Electron.* 5, 981-988, 1999.

Karabutov, A. A., Sarateeva, B. V., Podymova, N. B., and Oraevsky, A. A., Backward Mode Detection of Laser-Induced Wide-Band Ultrasonic Transients with Optoacoustic Transducer, *J Appl Phys.* 87 (4), 2003-20 14, 2000.

EXAMINER

/Jacqueline Cheng/

DATE CONSIDERED

(07/24/2006)

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.